/82 cont./

226 He lies in wait for the fish which are caught between the two dikes and are thus led toward the net which closes the barrier" (Palavecino).

The Uro like to fish at night: "It is a curious spectacle to see them on moonlit nights embark on their balsas in the direction of their barriers. At their destination they form a sort of conical tent with the totora sails, which shelters them from the wind, and they give themselves over to fishing" (Palavecino).

[411] When the Uro navigate on the Desaguadero, they always carry along with them a spear (p^{h}iri), whose point bristles with iron spikes. With this weapon they harpoon the suche (Tricomicterus), a fish to which they are very partial, in the mud where the water is not very deep.

223 Hunting. Hunting plays only a very secondary role in the Uro economy. In all, for game they have nothing beside the water birds which abound in the marshes of the Desaguadero. They strike them with bolas, of which two weights are cylinders of wood; the third is an oval stone, which they hold in the hand while they whirl this weapon over the head (Fig. 25, 3 /see p. 15/).

They also have recourse to extremely long nets in capturing these birds whose flight skims the water. These are stretched in a semicircle /83/ in the middle of the fields of totora and attached to faggots of rushes and to stakes. A part of the net is submerged to prevent the diving birds from passing beneath the surface of the water. The hunters on their balsas make noise to chase the birds toward the obstacle where the latter find themselves caught. Those which succeed in escaping are killed with bolas.

The cold of the Titicaca is such that in the mornings the birds are torpid. The Indians, hidden behind bundles of totora, draw near without being seen; they catch them by their claws and finish them off with their teeth or by twisting their necks.

241 Agriculture. The Uro today practice agriculture, just as the inhabitants on the shores of the Titicaca do. I do not know to what extent the produce of their fields contributes toward guaranteeing their existence. They cultivate, of course, potatoes and quinua.

1:Métraux--15 E-5 (1931) 1935 SF24 Uru SF24
Ancoaqui

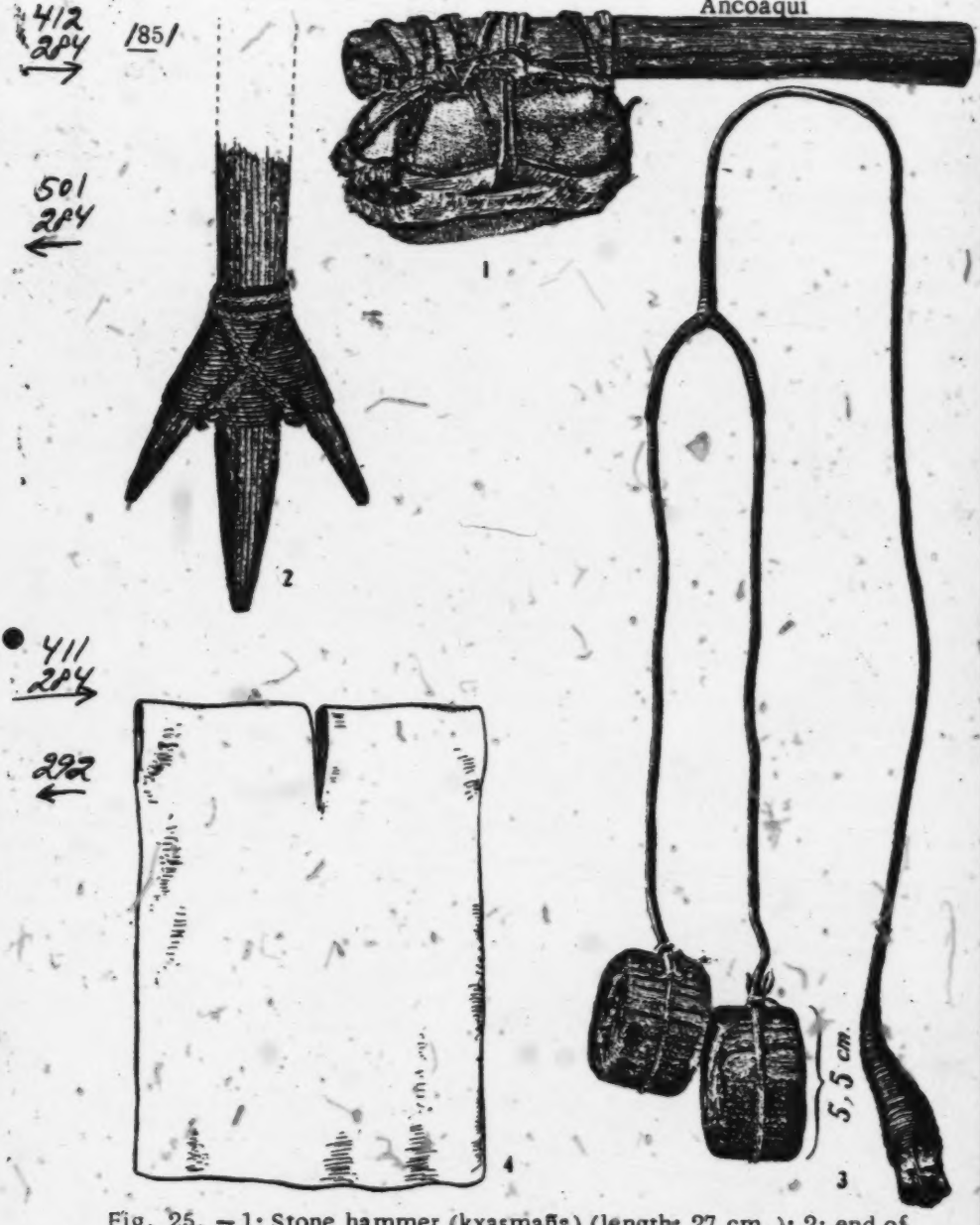

Fig. 25. — 1: Stone hammer (kxasmaña) (length: 27 cm.); 2: end of the boathook which the Uru use to propel their cane rafts (l'okena); 3: bolas (skuni); 4: tunic of white wool which the Uro wear over their modern clothes for certain occasions (ira) (length: 1.05 m. width: 0.62 m

/164 cont./

1. Posnansky (Ing. Arthur), Los Chipayas de Carangas /The Čipaya of Carangas/, La Paz, Bolivia, 1918, p. 6; La lengua "Chipaya" (Carangas, Bolivia) /The "Čipaya" Language (Carangas, Bolivia)/. La Paz, 1915, p. 2; "Nuevas investigaciones en Carangas (Bolivia) /New Investigations in Carangas (Bolivia)/," Congrès international des Américanistes, Record of the XXI Session, Part II, held at Göteborg in 1924, Göteborg, 1925, p. 91.

the principal food of the Čipaya. In reality, during my entire stay I never saw a Čipaya catch one, and when I asked them to get a few specimens for me, they demanded an exorbitant price from me, claiming the difficulty of this hunt. Toxo are rare in the territory properly called Chipaya; they are found only at a certain distance from the grassy zone behind the dunes. It is there that the Aymara come /165/ to capture them. Their method, as far as I can understand it from the explanations which have been given to me, is the following: they try to dislodge the toxo from the underground corridors where it stays by opening them with a blow from a shovel; then when it comes out they pursue it and beat it to death. In the plains undermined by the toxo, one can see the earth completely worked over by the hunters.

The Čipaya easily get hold of vicuñas by setting their dogs, swift and bloodthirsty beasts, on them. They themselves succeed in knocking down these animals with bolas, or throwing stones. This same weapon permits them to bring down water birds.

The fish to be found in the small ponds of the Chipaya plain are too miniscule for the word fishing to be used in connection with them. It is more as a pastime than for food that the Čipaya amuse

[i.e., The Toxo -- Analyst]

/166 cont./ When the pile of cheeses is high enough it is firmly bound with a wool rope and left to drip for a certain number of days. These cheeses, white and tasteless, are seasoned with salt which the Čipaya get from the great salt deposits which spread out about 30 kilometers from their village. /167/ /Figure 3 appears here./

/168/ Weapons

The small number of weapons that the Čipaya have is a direct consequence of the insignificance of hunting in their economy. As for war, it is an unknown phenomenon for them. Who would dream of coming to pick a fight with them for possession of the sand dunes or stunted pastures? The only occasions for giving free rein to their bellicose instincts are the festivals. The alcohol they absorb then accentuates the underhand rivalry of the sayas among themselves, and, awakening passions, leads them to often bloody fights. I do not know if any weapons other than sticks and fists enter into play in this case.

The sling (kxorawa) (Fig. 4, A /see p. 157/), which is the weapon par excellence of the indians of the altiplano, has only a peacable use in Chipaya: it is used to hurl lumps of earth at llamas or sheep to prevent them from straying from the flock or from the route being followed. It is possible that the Čipaya might have recourse to the sling when they have some quarrels with the people of the other saya, but I was never able to get particulars on this subject. Another circumstance contributes to making the sling of the Čipaya a harmless instrument: the lack of stones able to serve as projectiles.

The bolas of the Čipaya play a role close to that of the sling: they permit them to catch the sheep. The most common type is the ordinary bola. The stones instead of being caught in a leather sheath, as is the case with the archaeological specimens (Fig. 4, D-B), are furnished with a groove which prevents the rope from slipping (Fig. 4, J).

[Text continues on p. 156]

/168 cont./

223 411 171 In hunting water birds the Čipaya use a straw rope ending with a knot the size of a fist (Fig. 4, C /see p. 157/). This weapon corresponds exactly to the bola perdida of the ancient Patagonians, with the difference that among the latter the terminal ball was of stone. Aside from this the principle of these two weapons is the same. This is the first time that the bola perdida has been found elsewhere than at the southern end of South America. Its presence among the Čipaya is one more argument in favor of the archaic character of this culture trait.

223 411 The Uro Indians of the Desaguadero hunt the water birds which swarm in the totorales with bolas, two weights of which are wooden, and the third a small pyriform stone. The rope of this projectile is rolled up in very tough black thread. If the weapon does not reach its goal it floats on the water, and the Indians have only to pick it up with their balsas. /169/ /Figure 4 appears here./

/170/ Clothing

291 Men's wear. The essential piece of men's wear is a square shirt (ira) made of thick, stiff woolen cloth. It is a kind of sack with openings for the head and arms (Fig. 5, G /see p. 163/). As a result of its width the upper part of this shirt falls on the shoulders practically down to the elbow. The ira was formerly the only garment of the Čipaya, as it still is for young boys up to the age of ten. At a doubtlessly recent date, the Čipaya adopted the pants that they wear under their tunic. By making the latter bunch at the waist on a cord which takes the place of a belt for them, they have transformed it into a blouse, while keeping its original length which was enough to cover them down to mid-leg. The ira is the best product [53] of Čipaya textile art. The decoration of this article of clothing invariably consists of a blue border and small brown and white [386] strips separated by black lines. None of these dyes is aniline.

[TEXT CONTINUES ON P. 158]

/169/

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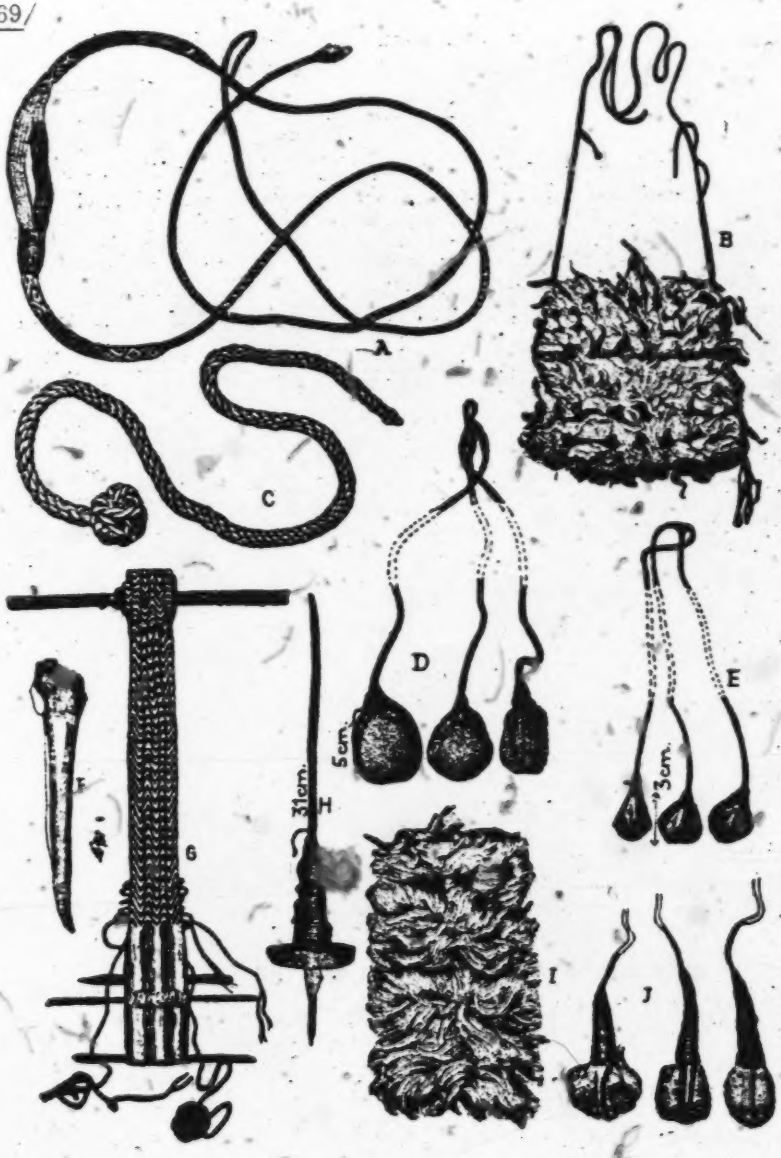

/See captions on next page./

/169 cont./

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Fig. 4.—Čipaya material culture. Weapons and technology.

A: Čipaya sling.

B: Bag (kāls) covered with white, black, and red tufts forming a sort of velvet.

C: Čipaya bola perdida.

D-E: Pre-Columbian bolas.

F: Weaver's dagger (wiña), of bone.

G: Čipaya loom for weaving women's belts (tsai).

H: Spindle with wooden weight /whorl/ (t'eri).

I: Bag (kāls) made from the skin of a llama's neck.

J: Weights of a modern Čipaya bola.

/194 cont./

U *171 A 342

the part where the sun appears, without any house having double rooms. The houses of the caciques and inns were long and square and the wood was brought from the Yungas." /Cited in Spanish./

U *171 [113] [114]

On some naive pictures in the book by Huaman Poma de Ayala, published by Montell, Dress and ornaments, p. 188, Fig. 86, one notices, in the background, some huts which a marginal note says to be "Inca depositories /cited in Spanish/." They seem to have a circular form and a domed roof.

U 571 621

The estancias of the Čipaya explain the formation of the small social units also called estancias, which are composed of several /195/ families which together constitute the ayl'u, or local clan of the present. We have no equivalent for this subdivision within the clan for the Inca period.

U *171 312

Canals. The system of canals laid out by the Čipaya to fertilize their wretched grazing lands offers nothing special in a geographical area where man has lived for centuries practically solely thanks to his irrigation works.

U *171 411 [30] [178]

Weapons. The sling and bola are two weapons employed not only in the ancient Inca empire, but practically in all of western South America. The sling early became a decoration, often sumptuous, which was worn like a headband around the forehead.

U [064]

Near Iscara, in the chullpares, I found bolas rolled around the wrist of some mummies, two of which are reproduced here (Fig. 4, D-E /see p. 157/).

5:La Barre E-5 (1937-1938) 1946
SF24 Uru SF24

Uru, who, at best, are an inhospitable, apathetic, and hate-filled group which has been condemned and harassed throughout its history.

The culture of the *Uru* is now largely like that of the *Aymara*, with whom they have recently extensively intermarried, but it preserves several interesting archaic features of altiplano culture.

CULTURE

SUBSISTENCE ACTIVITIES

Fishing.—The *Uru* depend primarily on fishing (pl. 118, *top*), secondarily on hunting, in the waters and totora reed swamps of Lake Titicaca and the Río Desaguadero. The dry land they own is so restricted that they have little agriculture, although they have some livestock

Fishing by moonlight is much favored. They frequently use a V-shaped weir made of reed bundles thrust into the mud of the swamp bottom, with a removable net at the opening of the V; the fish are driven into the converging fences by agitating the water with a bundle of reeds tied to a pole. The *Uru* also use three- and eight-pointed spears, but lack the bow and arrow. They have several kinds of nets. Large dip nets attached to a frame are handled by one fisherman; the netting is placed over a conical frame, the partially closed base of which is 10 ft. (3 m.) in diameter Another framed net is rectangular, a scoop net with a pole handle. Bottom and dragnets also exist; these are weighted with perforated stones at the bottom, and require a number of persons to drag them behind several balsas. Small fish, salted and toasted, are carried and eaten dry on journeys. Larger varieties are salted, scaled, boned, and stretched out between stones in a slow, smoky fire; thus smoke-dried, they are preserved for periods of scarcity.

Hunting.—Hunting is next in importance to fishing. The river marshes abound in water hens, ducks, geese, loons, herons, various diving birds, and gulls, of which only the loon is not eaten, because of its rank oily flesh. A kind of red duck (pana-soluna) is most frequently hunted. Hunting methods are varied. The *Uru* are skillful with slings, which are woven and braided of varicolored llama and sheep wool. They also use bolas, which have two large wooden floats for balls and a small, grooved, ovoid stone for a handgrip. One use of disguises has been reported. Early in the morning a man conceals himself in a bunch of reeds, slowly approaches the birds which are still stupefied by the cold of the night, then, grabbing them by the feet, quickly kills them by biting the head or twisting the neck. In communal hunts, nets, sometimes hundreds of meters long, are set in slightly curved lines on reed supports. Hunters in balsas make a noisy drive and frighten the birds into the almost invisible nets and dispatch them with clubs. The *Uru* also eat the eggs of aquatic birds, and sun-dry strips of their flesh to make a kind of charqui.

5:La Barre E-5 (1937-1938) 1946
SF24 Uru SF24

edge of the pontoons. The whole makes a sea-sled type of hull, which will not easily overturn even in the fierce storms of Lake Titicaca.

The balsa is poled along with a stubby trident, the wood for which comes from the yungas east of the Cordillera Real. In the open lake, a trapezoidal reed sail is rigged on two poles stuck deeply into the pontoons and forming an inverted V. The balsa is unable to tack in the wind, however, for it lacks a centerboard. Balsas are dragged onto the land from time to time lest they become waterlogged and rot. Though they may be bought for 10 to 16 Bolivian dollars (bolivianos), they represent much labor.

MANUFACTURES

Uru material culture is simple. Owing to the lack of trees, the giant totora reed (*Scirpus tatora*) is of extraordinary importance, providing material for fishweirs, roof mats (pl. 117, *top, left*), floor and sitting mats, rafters, doors, balsas, sails, and even food for animals and people. Metallurgy is unknown. Pottery making has been abandoned in recent times.

Basketry.—Crudely coiled baskets and twined tortora reed baskets are made.

Textiles.—The *Uru* make twine bird nets, mats of various types, sails, grass rope, and simple baskets (both coiled and twined). Women spin llama wool as incessantly as the men make grass rope, using a wooden spindle. They weave the yarn into cloth on a simple bar loom staked taut on the ground (pl. 116, *top*), rolling up the finished cloth on the end bar. When the end of the warp is approached, they weave from the other end, and finally fill in the last intermediate strip with a needle. Knitting is not pre-Columbian here, but *Uru* women are very skillful in knitting *Aymara*-type caps (gorros), often with amazingly intricate animal figures and other designs. Men's slingshots are very beautifully braided of wool with varicolored diamond designs like the markings on snakes. The *Uru* also make thongs of twisted rawhide still retaining the fur, and heavy braided woolen ropes for lashing loads on burden animals.

An extremely interesting textile, apparently unique to the region southeast of Lake Titicaca, is a kind of feather cloth described by David Forbes (1870). The down of lake birds was spun into thread, and then knit into caps and children's socks and gloves. Only a few specimens of these exist in museums.

Weapons.—To make bolas, the *Uru* buy cotton thread from traders and wind this tightly around a cord Y to make a durable bird-hunting weapon. A straw-cord bola perdida, similar to that of Patagonia, is also used.

Metals.—The *Uru* know no metallurgy, although the *Aymara* of Jesús de Machaca, scarcely a day's journey away, are famous for their

9:La Barre E-4,5 (1938) 1941
SF24 Uru SF24

native names for so exiguous a number of scientific varieties. These occur in the species: *O. Cuvieri, O. Pentlandi, O. Humboldti, O. Jussieui, O. Bairdii, O. Orionnii, O. frontosus, and O. Neveui.* Of the *Trichomycteri* (Aymara *suči, mauri;* Uru *čisi*) these species are present: *T. dispar Tschudi,* and *T. rivulatus.* Other native names for fish, which I have been unable to identify clearly with the scientific classifications are: (Aymará) *qesi-čoqa, qesintus, kuri-mauri, umanta, Karači;* (Uru) *teri, čis, čaki, okʷulu, čalkiri,* and *wakʷluli* —whence it appears that the natives give separate names to the male and female of the same species.

Fish are preserved and prepared in several ways. The smaller kinds (*ispi, sačaqa, učerčula*), salted and toasted, are carried and eaten dry on journeys. The larger varieties (*suči, mauri, čisi*) are salted, scaled, boned, and stretched out between stones in a slow, smoky fire, and thus smoke-dried are preserved for periods of scarcity, according to Posnansky. But what appears to be the same process, described by Palavecino, is evidently a method of *cooking:*

> These ovens, which the Uru call *soxaño*, consist in a hole dug in the soil, whose depth, equal to the diameter, is about 60 cm. The rounded edge is raised at the surface of the ground, and the entire interior is plastered with clay. The Uru light a fire in it and introduce more or less flat stones. When the stones are incandescent, they take them out, all except those on the bottom. They lay on these a layer of fish, on which is placed a second bed of stones, then a layer of fish, and so on until the oven is full. It is closed with stones, and covered with reeds. The fish is thus cooked by steaming.

Métraux notes that this is a very ancient type of earth oven in South America.

Hunting is almost as important to the Uru as fishing, neither of which is basic in Chipaya economy. The river marshes abound with birds of many kinds: waterhens (*wesla, čokχa*), ducks (*soχna*), geese (*waqata*), loons (*pako*), herons (*ačičí*), various diving birds and gulls; a large unidentified black bird they call *čiwanku* or *čičinksa.* Other unidentified birds are: *čelito, kačuwaina* (*waina* is Aymará for "youth, young man"), *ačowa, čorani.* Of these aquatic birds, only the "bobo" (*pako*) is not hunted or eaten, because of its rank, oily flesh. Most frequently hunted is a kind of red duck called *p'anasoχna.*

The Uru hunt birds by several methods. Posnansky says men hunting alone in the early morning disguise themselves in bunches of reeds, slowly approach the birds who are still stupefied by the cold of the night, then, grabbing them by the feet, they quickly kill the birds by biting the head or twisting the neck. The Uru are able users of slingshots woven or braided of varicolored llama-wools; and they also use *bolas,* made with two large

9:La Barre E-4,5 (1938) 1941
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Aymara SF5

wooden balls and a small grooved, ovoid stone for the handgrip.[32] They have no firearms, nor have they ever possessed them apparently. The bow and arrow is likewise lacking; spears are used only in obtaining fish.

An interesting group-hunt at determined periods employs both men and sometimes women. They stretch in selected sites extensive nets, sometimes hundreds of meters long, for birds whose flight is near the surface of the water; the nets are extended below the surface also, to prevent the escape of diving birds. They anchor the nets to faggots or clumps of *totora* set in slightly curved lines. Then hunters in their *balsas* make much noise and frighten the birds into the almost invisible nets, where they can despatch them with clubs (*yokena*), and kill with their *bolas* those which attempt to escape. Uru also eat the eggs (*šiši*) of aquatic birds. The flesh of the birds is cut into strips, hung in the sun, and dried into a kind of *charqui* ("jerky," from the Aymará *čarki*).

The Uru do little hunting of land animals. Vicuñas (*Auchenia vicuña; sahala*, a word obviously related to Aymará *kala*, llama) are extremely scarce or absent, as are also guanacos. It is said, however, that in winters of very extreme cold[33] small groups of vicuñas may stray down into the Desaguadero region. The head male of the herd is lassoed, and the others of the herd, immobilized by the cold, are speedily killed. The small rodents of the pampas, like the viscacha (*šičai*), apparently are not hunted by the Uru. Most of the birds they kill, like a good proportion of the fish they catch, they take to the villages to trade for other food and necessary articles, since these are their sole source of revenue, beyond their *balsa*-making.

Material Culture. The stalks of the giant reed *totora* (a *Cyperaceous* plant, *Scirpus totora*) are surely the most important substance in Uru material culture: of them they make fish-weirs, supports for bird-nests, roof-mats, floor- and sitting-mats, rafters, doors, *balsa*-boats and their sails; and the few cattle they have browse upon the roots of the *totora* as well. Unless *balsas* are frequently removed from the water and thoroughly dried, they last scarcely longer than a year or two before rotting. The Uru *balsa*-builders are famous and supply many of their Aymára neighbors with them in the southwestern region of Lake Titicaca. The reeds must first be cut with

[32] An Uru *bola* from the Desaguadero is now in the possession of Dr Frank G. Speck, in his private collection at the University of Pennsylvania.

[33] The Aymára have a phrase to designate extreme cold or "brass-monkey" weather: *q'ala* ("stone"), *lakaya* ("to split"), *wari* (vicuña), *q'asaya* ("snakes cry"), i.e. weather cold enough to split stones and make the fluffy-wooled vicuña scream. The Aymára schoolboys in La Paz—according to my "cholo" interpreter, the late Moisés Alvarez, who was one of them—have made a very effective football ("futbol") yell of this familiar phrase: *q'ala lakaya wari q'asaya, ara ura!*

9:La Barre E-4,5 (1938) 1941
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difficult to come by in this treeless region. Some poles are obtained from sheltered valleys near the Lake, the rest of the wood from the Yungas of La Paz.

Hunting weapons are limited to fish spears (*pivi*) and *balsas* (Ikassi), though nets and weirs are also used in hunting and fishing. The bow and arrow is unknown to the modern Uru, though there is archaeological evidence that it is not unknown to the Bolivian *altiplano*.

Musical instruments of the Uru are merely an incomplete list of those in use among the neighboring Aymára. They are the *siku* (a kind of double panpipe, with four rows of graduated reeds fastened together into two groups of two rows each), the *peks* (Aymará *pusiña*, lit. "four holes"), the *qena* (another Aymára flute, with six stops, five in a row and one on the side), and the drum (Uru *p'ou*). The reeds of which these are made are not *totora*, but come from a noded bamboo-like plant in the *yungas*. The *siku* is played with the two parts held together vertically, like an ordinary panpipe, the *pusiña* or *peks* and the *qena* with the instrument held in front of the chest, at a downward angle, like a clarinet. All the categories of musical instruments have their appropriate use in ceremonies with a definite position on the calendar. They are played in groups of one kind only, never mixed orchestrally save with the drum.

Economically, the only articles of importance of Uru production are fish, *balsas*, and large *totora*-mats (or *lexawa*, for carpets in "cholo" huts). These are exchanged for *t'aŭa*, *coca*, net-thread, *haŭawa* (quinoa), and the few other indispensables of Uru life.

The sexual division of labor is the following: men—fishing, hunting, net-making and -repairing, the cutting of *totora* and all the processes in the manufacture of *balsas*, mat-making (*lexawa* and *lawara*), the playing of musical instruments, and the making of their own tools; women—spinning and weaving llama-wool, cooking, and formerly pottery-making and basket-making. Only women use the simple loom, and only men the foot-loom. The chief leisure-time activity of the men is grass rope twisting or braiding (Posnansky, quite unaccountably, and I am sure mistakenly, says the women gather the grass and make the cords for the *balsas*), while that of the women is spinning llama wool. Women are the traders of everything save *balsas*. Their meager agriculture and herding are common to both sexes; children commonly care for the animals.

Social Organization. The best information we have on the social organization of the Uru is that of Métraux:

> The information which I have gathered on their social organization is unfortunately very inexplicit. They are divided into clans, the list of which was dictated to me: [illegible] are, T.t.cana, Konko, Kama, Kuipa.